CROSS FUNCTIONAL TEAM ORIENTATION

2 FEBRUARY 2005

GOALS FOR TODAY'S MEETING

- ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) – THE BIG PICTURE!
- WHAT IS EMS?
- CROSS FUNCTIONAL TEAM OVERVIEW

THE BIG PICTURE!!!!

WHY IS THE ARMY DOING EMS?

- EO 13148 stated that all Army installations will develop an EMS system based on ISO 14001
- The ultimate goal of the Army EMS is to reduce the impact to the environment from Army operations and reduce enforcement actions
- The actual EMS is the management system created to insure that we minimize the impact to the environment from our operations. (i.e. Inspection program is the management system used to prevent compliance problems)

WHY IS THE ARMY DOING EMS?

- Advantages of EMS:
  - Enhance regulatory compliance – less enforcement actions
  - Federal agencies expect use of an EMS to expedite permitting, reduce regulatory oversight costs, and reduce reporting requirements.
  - Good public relations
  - Saves money!
    - Example: Less waste to dispose
    - Example: Oil program (MLC)

EMS SHIFTS OUR ENV MGT FOCUS

- **Traditional Philosophy:**
  - Meet environmental regulatory requirements to avoid negative consequences – do what's required

- **New Philosophy:**
  - Anticipate potential problem areas and proactively implement positive improvements

WHAT IS EMS????

EMS AND ISO 14001

- The International Organization for Standardization has created ISO 14001 to specify the contents of an EMS

- The Army is not alone - EMS is being implemented all over the world
  - Private companies
  - Cities (i.e. Heidelberg)
  - Some companies requiring their subs to be certified

ISO 14001

1 Scope
2 Normative references
3 Definitions
4 Environmental Management System Requirements
- 4.1 General Requirements
- 4.2 Policy
- 4.3 Planning
  - 4.3.1 Environmental Aspects
  - 4.3.2 Legal and Other Requirements
  - 4.3.3 Objectives and Targets
  - 4.4.4 Environmental Management Program
- 4.4 Implementation and Operation
  - 4.4.1 Structure and Responsibility
  - 4.4.2 Training, Awareness and Competence
  - 4.4.3 Communication
  - 4.4.4 EMS Documentation
  - 4.4.5 Document Control
  - 4.4.6 Operational Control
  - 4.4.7 Emergency Preparedness and Response
- 4.5 Checking and Corrective Action
  - 4.5.1 Monitoring and Measurement
  - 4.5.2 Nonconformance and Corrective and Preventive Action
  - 4.5.3 Records
  - 4.5.4 EMS Audit
- 4.6 Management Review

OTHER DOCUMENTS

- Army Implementers Guide
- ISO 14001 Implementation Guide
- ISO 14004 EMS General Guidance on Principals, Systems and Supporting Techniques
- ISO 10911: Guidelines for quality and/or environmental management systems auditing
- ISO 9001: Product Quality

WHAT IS EMS?

- Remember the overall goal for EMS is to reduce our impacts on the environment – we need to put a system in place to allow that to happen

- Steps for EMS implementation:
  - Create a policy
  - Do Gap analysis/implementation plan
  - Aspects and impacts register
  - Rank aspects and determine objectives and targets
  - Create EMS structure – roles and responsibilities
  - Create manual and procedures
  - Document control
  - Management review
  - Audits/Certification

- We are currently in the “paperwork intensive” phase of EMS implementation

MILESTONES

- **DA Implementation Timeline:**
  - Policy Statement 30 Sep 03
  - Self Assessment 30 Mar 04
  - Implementation Plan 30 Sep 04
  - Prioritize Aspects 30 Mar 05
  - Training 30 Mar 05
  - EMS in Place w/ 1 Mgmt Review 31 Dec 05
  - Fully Conforming EMS 30 Sep 09
- Contractor was used to meet milestones before CFT was assembled

ENVIRONMENTAL POLICY

- The environmental policy describes the organization's overall approach.

- To meet ISO 14000 requirements, the policy must:
  - Be appropriate to the nature, scale, and environmental impacts of the installation and its entities.
  - Include a commitment to continual improvement and prevention of pollution.
  - Include a commitment to relevant legal requirements.
  - Provide a framework for setting and reviewing environmental objectives and targets.
  - Be documented, implemented and maintained, and communicated to all employees.
  - Be available to the public.

GAP ANALYSIS

- Completed November 2004 by AMEC
- Comparison with ISO Standard 14001
- Review included:
  - Document Review
  - Interviews
  - Site visits
- Report includes list of deficiencies in each area of the ISO standard

EXAMPLE GAP ANALYSIS

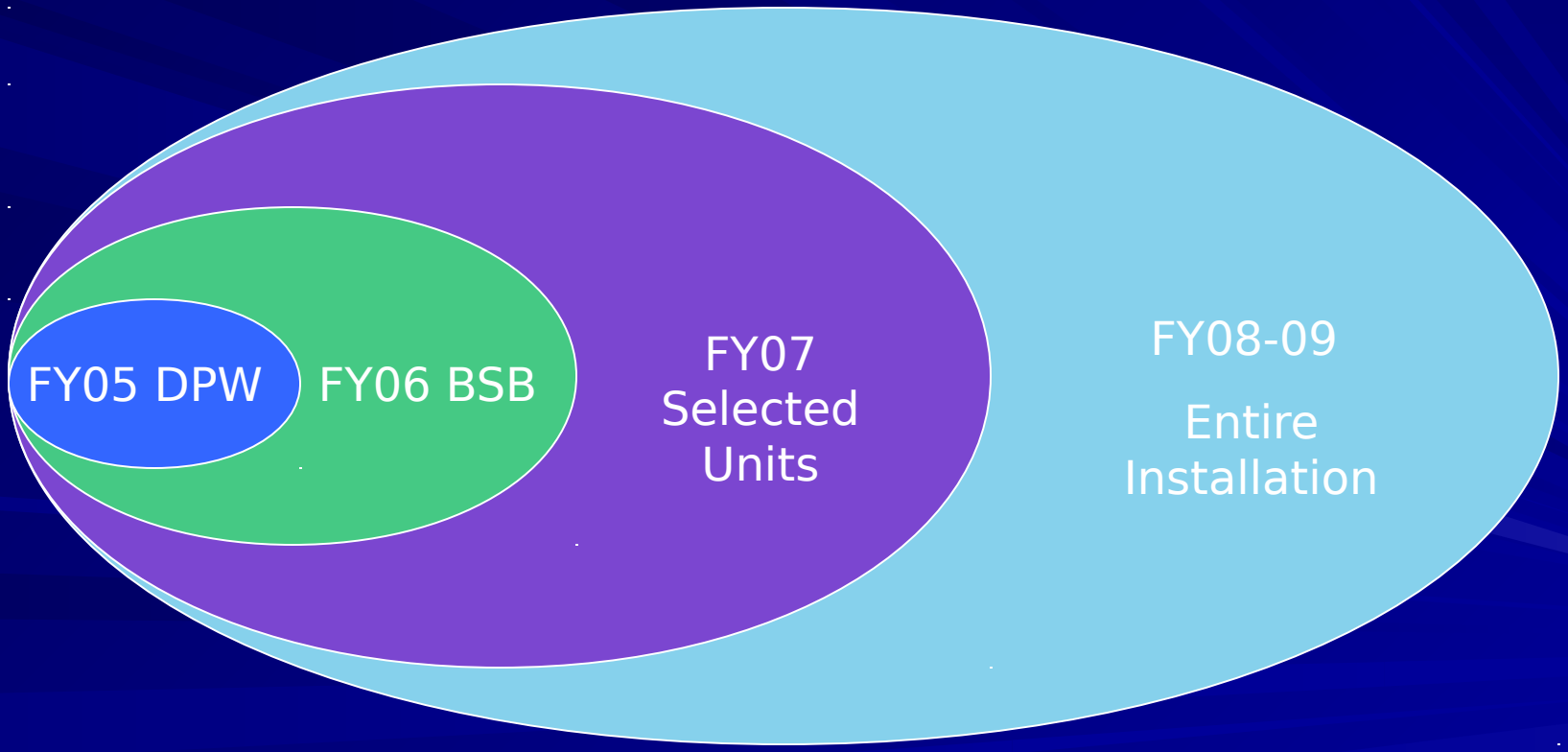
- ISO Standard Section 4.3.1 States *"The organization shall establish and maintain procedures to identify the environmental aspects of its activities, products or services....."*
- The BSB did not have any procedure in place to identify environmental aspects and impacts

IMPLEMENTATION PLAN

- How will we fill the gaps?
- The plan addresses actions the BSB must complete to be compliant with the ISO 14001 standard.
- Report outlines task element by element following the standard.
  - Defines roles and responsibilities and level of effort for each task

EMO VISION FOR EMS IMPLEMENTATION

"Fence to Fence by 2009"



EXAMPLE FROM IMPLEMENTATION PLAN

- ISO Standard Section 4.3.1 States *"The organization shall establish and maintain procedures to identify the environmental aspects of its activities, products or services….."*
- Implementation plan specifies a task to develop an aspect inventory and ranking database. (includes estimate of level of effort and who is responsible for completing the task)

IMPLEMENTATION – MAJOR TASKS

- Prepare/rank Aspects and Impacts inventory*
- Create objectives and targets
- Write an EMS manual
- Write procedures for the system
- Identify legal and regulatory requirements
- Establish document control procedures
- Awareness Training*
- EMS management review/audit*

*DA METRIC

ASPECT AND IMPACT ANALYSIS

- In order to minimize our impacts to the environment we need to know what they are.

EXAMPLE: BUILDING RENOVATION

Activity	Aspect	Impact
Demolition: * Remove walls/window etc * Remove furniture/appliances etc * Remove pipes/floor tiles * Remove waste left in basements etc	* Generate solid waste/scrap metal * Generate asbestos waste (pipes, floor tiles etc) * Generate HW/HM waste * Generate Dust * Use of loud Equipment * Unsightly work area * Shut off water mains * Use of electricity/gas/water	* Waste generation * Reduction of air quality/waste generation * Waste generation * Reduction of air quality * Noise * Visual impact * Decrease water quality * Depletion of natural resources
Cleaning	* Use of industrial cleaning materials * Use of electricity/gas/water	* Water generation/decrease water quality * Depletion of natural resources
Renovation: * Painting * Install appliances etc * Replace carpet /flooring	* Use of paint * Use of other chemicals such as caulk, glue and other chemicals * Generate solid waste * Use of electricity/gas/water	* Waste Generation * Waste Generation * Waste Generation * Depletion of natural resources

SIGNIFICANT ASPECTS

- We have decided to use a formula of:

LIKELIHOOD X CONSEQUENCE = RISK

- Some aspects may be chosen using quantitative data or “best professional judgment”
- Choose a few significant aspects for objectives and targets

SAMPLE OBJECTIVE AND TARGET

- Reduce toxic chemical use in building renovation by 10% by 2007. (For example use only environmentally friendly cleaning solutions)

- Every objective and target will have an action plan which includes:
  - Specific tasks
  - Cost data
  - milestones

EXAMPLE PROCEEDURE

- SOP for Building Renovation

  The procedure should outline the review process that the SOW will go through to make sure than potential environmental impacts are addressed, and that the designer specifies that the contractor should use environmentally friendly products where possible. The procedure may also include construction inspection requirements to make sure that the intent of the SOW is met.

EMS MANUAL

- Roadmap for the entire EMS system
- Manual should address all 17 elements of the ISO 14001 standard.

AUDIT

- Some organizations are ISO 14001 certified – must pass an audit – Army is not requiring this at present
- EPAS will become EMS audit in the future
- We will have to conduct internal audits
- This year only need a management review – have not received guidance on this yet

CROSS FUNCTIONAL TEAM OVERVIEW

WHY FORM A CFT?

- The Army EMS Implementers guide stipulates that each installation should set up a cross functional team (CFT) to facilitate the EMS implementation.
- The CFT should be diverse with individuals from various operations across the installation.
- The CFT members should have good knowledge of the various processes and environmental requirements at the installation.

WHY HAVE I BEEN APPOINTED TO THE CFT?

- Environmental professionals
- Your units activities have high impact on the environment
- Advantages:
  - EMS is here to stay – be on the front edge of the power curve
  - Great resume builder

WHAT WILL I DO AS A CFT MEMBER?

- CFT team members will be instrumental in designing the EMS process across the installation by acting as subject matter experts
- Possible CFT tasks:
  - Advise on content, and review EMS Manual
  - Review aspects and impacts analysis
  - Advise on content, and review procedures
  - Help create action plans for objectives and targets
- Remember the goal for EMS – reduce our impact on the environment

SHORT TERM TASKS

(TO BE COMPLETED THIS FY)

- Training
  - Read all documents prepared so far (briefings???)
  - IMA sponsored training
  - Auditor training
- Review aspects and impacts register
- Review objectives and targets
- Review and provide input on EMS manual – drafted by contractor
- Review and provide input on EMS procedures – drafted by contractor
- Participate in management review

LONG TERM TASKS

- Champion EMS as it moves out “toward the fencelines”
- Identify laws and regulations in your areas
- Create aspects and impacts analysis for daily operations in your work area
- Write procedures specific to your work area
- Set up document control at units

SCHEDULE

- Briefings
  - ISO 14001
  - Army implementation plan
  - Implementation plan
  - Aspects and impacts register/include review
- Review objectives and targets
- EMS manual brainstorming session
- EMS manual review
- Procedure brainstorming session
- EMS procedure review
- Management Review